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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,754	04/09/2004	Arnold R. Craven	P5630.0000/P029	8778

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EXAMINER

SAETHER, FLEMMING

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/820,754	CRAVEN, ARNOLD R.	
	Examiner	Art Unit	
	Flemming Saether	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17-19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-19 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Initially, in regards to the claim identifiers, the claim identifiers for claims 26 and 27 appear incorrect because with 26 as "(new)" how is 27 "(canceled)",

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15, 17-19 and 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In light of applicant's remarks, it is unclear what is the structure intended by the claimed "knurled portion", "flute", "circumferential lip" and "transition section". By way of arguments, the applicant contends that what is generally considered in the art to be a knurl, flute, circumferential lip and transition are in fact not but, then never indicates what they are. In general, it is unclear what applicant intends as the meets and bounds of the claimed "knurled portion", "flute", "circumferential lip" and "transition section" because applicant is arguing away from their recognized meaning. Applicant should make clear what is intended by the terms in question; if it is as those features are disclosed in the specification then that should be made clear. For the purposes considering the features in relation to the prior art, they were given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974).

Claim Rejections - 35 USC § 102

Claim 12, 14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Searelle (US 877,131). Searelle discloses a screw comprising a shank with a tip (5) at one end and a head (2) at the other end with a circumferential lip (9); a thread (1) is provided on the shank; two flutes (4) are provided on the shank between the thread and head which inherently would include a transition section; and the head includes a rib (7) on a lower surface thereof which is "continuous" between its ends.

Claim Rejections - 35 USC § 103

Claim 12, 14 and 17 are alternatively rejected under 35 U.S.C. 103(a) as being anticipated by Searelle (US 877,131) in view of Lieggi (US 5,518,352). Searelle discloses a screw comprising a shank with a tip (5) at one end and a head (2) at the other end with a circumferential lip (9); a thread (1) is provided on the shank; two flutes (4) are provided on the shank between the thread and head which inherently would include a transition section; and the head includes a rib (7) on a lower surface thereof. Searelle does not disclose the lip to be an uninterrupted circumferential lip. Lieggi discloses a screw wherein the head includes an uninterrupted circumferential lip (26). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the head of Searelle with an uninterrupted circumferential as disclosed in Lieggi because the lip provides an improved finish to the surface and disclosed therein.

Claims 1, 3-8, 10, 11-15, 17, 24 and 25-27 (some alternatively) are rejected under 35 U.S.C. 103(a) as being unpatentable over Searelle in view of Jones (US 471,179). Searelle discloses a wood screw comprising a shank with a self-drilling tip (5) at one end and a head (2) at the other end including a circumferential lip (9), a thread (1), two flutes (4) between the thread and head extending to a neck of the screw inherently including a transition to the thread; and a rib (7) on a lower surface of the head. Searelle does not disclose a knurled portion between the thread and head. Jones also discloses a wood screw having a shank with a tip (a), a head (c) and a thread (b) but, in Jones there is further provided a knurled portion (d) located between the thread and head which inherently must include a transition. In the embodiment of Fig. 6, the knurl is shown to have intersecting troughs. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the shank of Searelle with a knurled portion as disclosed in Jones in order to provide the screw of Searelle with a securement means to prevent slipping during rolling of the threads (see pg. 2, l. 11-20 in Jones). The "positive lock" as described in Jones would improve the rolling of the threads in Searelle by preventing the unwanted slipping of the rolling-dies. Once the combination was made, the skilled artisan would have recognized to use the screw in particle board and polymer or bulging material because those materials are well known for screw attachment and therefore when a screw is inserted in those materials the result of the particle and bulge displacement would be inherent since the structure is the same as that claimed.

Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Searelle in view of Jones or Searelle alone as applied to claims 1 and 12 above, and further in view of Köing (US 5,772,379). Searelle does not disclose the first and second different ribs. Köing discloses a screw including first (8) and second (9) different ribs on the underside of a head (1) and further discloses the head having a circumferential lip (5) one of the ribs extending to the shank (see Figs. 4 and 5). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the underside of the head of Searelle with ribs as disclosed in Köing in order to provide an improved countersink means by improving the cutting action and chip as discussed in Köing.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flückiger or Searelle in view of Jones as applied to claim 7 above, and further in view of Farrell (US 4,653,244). Farrell teaches to provide the upper surface of a screw head with a roughened surface (at 18). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the screw of Flückiger or modified Searelle with a roughened surface as disclosed in Farrell so as to provide an improved adhesion surface for a joint compound or other covering material depending upon the application.

Claims 18, 19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Köing. Jones discloses a screw comprising a shank

having a tip (a), a head (c), a thread (b) and, a knurled portion (d) between the head and thread with a transition but, does not disclose the underside of the head provided with a rib. Köing discloses a screw including first (8) and second (9) different ribs on the underside of a head (1) and further discloses the head having a circumferential lip (5) one of the ribs extending to the shank (see Figs. 4 and 5). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the underside of the head of Jones with ribs as disclosed in Köing in order to provide a countersink means. The countersink means would be advantageous in Jones to facilitate the formation of the countersink to allow the upper surface of the head to be flush with the surface.

Claims 10 and 21 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Searelle in view of Jones and Jones in view of Köing as applied to claims 7 and 18 respectively, and further in view of Lieggi. Lieggi discloses a screw wherein the head includes an uninterrupted circumferential lip (26). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the head of modified Searelle or Jones with an uninterrupted circumferential as disclosed in Lieggi because the lip provides a further improved finish to the surface and disclosed therein.

Response to Remarks

Applicant argues that Flückiger fails to disclose the both the claimed knurled portion as well as the flute. In response, the examiner disagrees because with the

claims given their broadest reasonable interpretation the features are disclosed in Flückiger. The examiner concedes that Flückiger does not show the features as they are disclosed in instant application.

Applicant argues that Searelle fails to disclose both the circumferential lip and transition section. In response, as with the features argued above, the examiner disagrees because with the claim given their broadest reasonable interpretation the features are disclosed in Searelle. Again, the examiner concedes that Searelle does not disclose the features as disclosed in the instant application. Furthermore, the lip is considered as "continuous" between its ends.

As noted in previous office actions, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues the combination of Searelle and Lieggi is improper because there would be no reason to no reason to provide the head of Searelle with a uninterrupted circumferential lip as disclosed in Lieggi because each fastener if for different application. In response, the examiner disagrees because the advantages provided by the lip in Lieggi would be equally applicable to a use with wood as it is with drywall in that it would similarly limit the penetration of the countersink. In that regard, it should be recognized that both Searelle and Lieggi intend for the head to countersink.

Applicant next argues the combination of Searelle and Jones is improper because there would be no reason for the combination to provide the shank of Searelle with a Knurl. In response, the examiner disagrees. As argues at length in the previous office action, the examiner maintains the rejection as being proper.

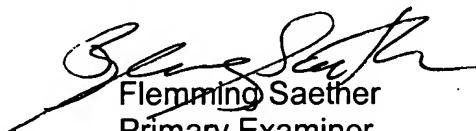
Applicant argues that the reason used by the examiner for combining the knurls Jones with Searelle is only an ancillary consideration and ignores the reaming function of knurls. In response, the examiner disagrees because the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 571-272-7071. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Flemming Saether
Primary Examiner
Art Unit 3677